

### Description

- Very low height 1.27 x 1.05mm SMD crystal in a hermetically sealed ceramic package with a sealed metal lid. Suitable for Real Time Clock applications.
- Model IQXC-146
- Model Issue number 2

### Frequency Parameters

- Frequency 32.7680kHz
- Frequency Tolerance  $\pm 20.00$ ppm
- Tolerance Condition @ 25°C  $\pm 5^\circ\text{C}$
- Overtone Order Fundamental
- Ageing  $\pm 5$ ppm max in 1st year @ 25°C  $\pm 3^\circ\text{C}$
- Turnover Temperature 25°C  $\pm 5^\circ\text{C}$
- Frequency Stability Coefficient:  $-0.036$ ppm/ $^\circ\text{C}^2 \pm 10\%$

### Electrical Parameters

- Load Capacitance (CL) 6.00pF
- Shunt Capacitance (C0) 1.4pF typ
- Drive Level 0.1  $\mu\text{W}$  typ, 0.3  $\mu\text{W}$  max
- ESR 90.00k $\Omega$  max

### Environmental Parameters

- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock: 100g dummy dropped 10 times in 3 axis from a height of 1500mm onto concrete.
- Vibration: 1.5mm amplitude, 10~60Hz, 15mins cycle time in X, Y and Z axis, 2hrs each axis.

### Manufacturing Details

- Note: the use of ultrasonic cleaning must be tested by the customer to check suitability as the device can be destroyed by this method depending upon the frequency, power, time and position in the bath.
- RoHS Terminations AuNi
- RoHS Reflow Temp  $250^\circ\text{C} \pm 10^\circ\text{C}$  for 10sec max.

### Compliance

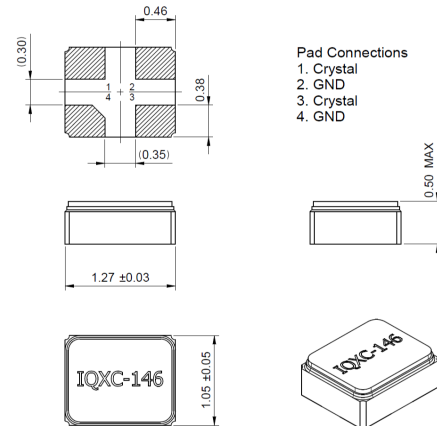
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

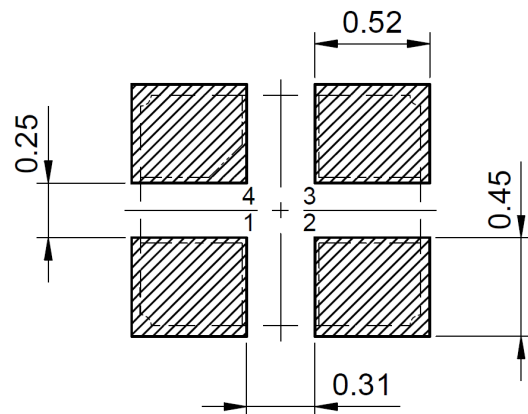
- Tape & reel in accordance with EIA-481  
Quantities below the standard reel size to be supplied on cut tape.  
Standard Quantity: 5,000 Pieces



### Outline (mm)



### Recommended Solder Pad Layout



### CONTACT INFORMATION:

Würth Elektronik eiSos GmbH & Co. KG  
Max-Eyth-Str. 1, 74638 Waldenburg, Germany  
Tel: +49(0) 7942 945-0

Email: eiSos@we-online.de  
Web: www.we-online.com

### USEFUL LINKS

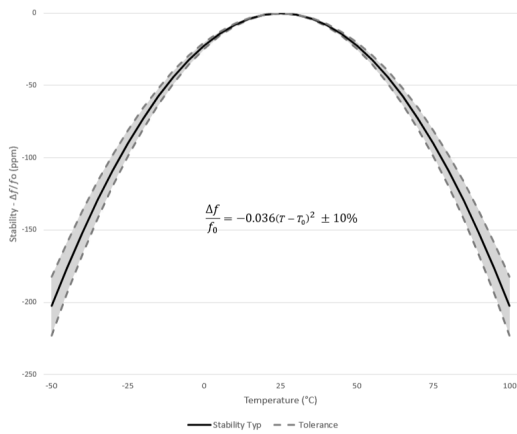
Toolbox:

[www.we-online.com/toolbox](http://www.we-online.com/toolbox)

Product Catalog:

[www.we-online.com/products](http://www.we-online.com/products)

### Typical Frequency Stability Characteristics



### CONTACT INFORMATION:

Würth Elektronik eiSos GmbH & Co. KG  
Max-Eyth-Str. 1, 74638 Waldenburg, Germany  
Tel: +49(0) 7942 945-0

Email: [eiSos@we-online.de](mailto:eiSos@we-online.de)  
Web: [www.we-online.com](http://www.we-online.com)